

BIOCULTURAL ANALYSIS: THE EFFECT OF THE ADVERTISING CAMPAIGN “5 A DAY” ON PUPILS

Julia Navas López¹

Universidad Católica San Antonio, Murcia

www.alimentacion.ucam.edu

Resumen.- Objetivos: Análisis del efecto de la campaña “5 al día” en escolares. El estudio se realiza desde la antropología de la nutrición. Metodos: En una muestra de 90 escolares de 3 a 5 años de un centro escolar privado de la Comunidad Autónoma de la Región de Murcia, en un total de 9 aulas, dos por nivel, se seleccionan 10 niños por clase que no comen en comedor. El análisis se realiza en el primer trimestre del 2005, con la combinación de metodologías cualitativas y cuantitativas: revisión bibliográfica, 9 grupos de discusión a niños, 90 entrevistas semiestructuradas a familiares, 9 talleres nutricionales y 180 cuestionarios de frecuencias. Resultados: Los escolares que fueron sometidos a la publicidad alimentaria no mantuvieron su conducta en el tiempo. Aunque la publicidad era una herramienta útil, en el consumo de frutas y hortalizas, fue mayor la influencia de sus semejantes. Conclusión: La complejidad del comportamiento alimentario implica la introducción del aspecto nutricional junto con otros muchos factores, por ello la acción educativa debe tener en cuenta la variable relacional y, en concreto la influencia de los iguales.

Palabras clave.- *antropología de la nutrición, comportamiento alimentario, campaña alimentaria, nutrición, educación*

Abstract.- Objective: We analysed the effect of the advertising campaign “5 A Day” on pupils. The investigation focused on how pupils perceived food advertising from an anthropological point of view. Design: The analysis was based on a combination of qualitative and quantitative methodologies. The following items were used for the study: References revision, Participant observation, 9 discussion groups with pupils, 90 semi structured interviews to families, 9 nutrition workshops, Collection of data using frequency questionnaires (180). Setting: We selected 10 pupils in each classroom. We only selected pupils that didn't eat in the school dining room. Participants: A sample of 90 pupils (aged from 3-5) in a private school in Murcia. The parents of each child. Interventions: In the first term of the 2004-2005 course. A participant observation was made: during the first two weeks the students were shown a video. The children were involved in various nutritional workshops. Interviews were carried out to the parents of each child. After the workshops, six discussion groups were executed (one for each classroom). Results: Pupils that saw the food adverts didn't maintain their revised eating habits over time. Although they believed food advertising was a useful tool in the consumption of fruits and vegetables, there were other, more important influences. There were other influences like seeing their peers eating fruit and vegetables. Conclusion and Implications: Eating habits are very complex and rely on nutritional guidance as well as other factors. Because of this we must study other variables, like the influence of peers.

Key Words.- *anthropology of nutrition, food advertising, eating habits, nutrition, education*

¹ Anthropologist and Nutritionist

INTRODUCTION

In 2005, The Spanish Ministry of Health and AESAN (Spanish Agency of Food Safety and Nutrition) came up with the NAOS strategy (Nutrition, Physical Activity and Obesity Prevention strategy).

NAOS controls a lot of things to do with food: school dining rooms, installation of vending machines and food and drink advertising to minors. Its clear objective is to stop obesity.

Since the end of 2004, NAOS has been controlling nutrition from infancy through to adolescence, and is reflected in the book *Your children's Food* (1).

Furthermore, they started the PERSEO program. This program tries to organize and promote healthy food and physical activities among pupils. In 2006-2007 this program began in schools in Castilla y Leon, Galicia, Murcia, Extremadura, Andalucía, Canarias, Ceuta and Melilla.

Spanish Public Health is fighting obesity in children. It's now considered a national epidemic and is a leading cause of heart disease, cancer, diabetes, stroke, arthritis and other health problems (2). Several interventions have changed school food environments, for example, by reducing fat content of food in vending machines and making more fruit and vegetables available. Interventions are just beginning to target the availability of competitive foods.

The roles of schools, the food industry, fashion, advertising, mass media and the family in the prevention of obesity are essential. School health services can also help address obesity by providing screening, health information, and referrals to students, especially low-income students, who have a higher risk of obesity, tend to be underinsured, and may not receive health services elsewhere (3).

In addition, advertising is related to the acceptance of many recommendations made by food experts and is used to reinforce and spread cultural guidelines (4).

From an anthropologic point of view, advertising and experts are the ones who explain and recommend nutritional scientific methods to follow. The nutritional expert claims to be the real authority that chooses which foods are considered correct.

On the other hand, public health organizations use the development of new nutritional technologies. They have developed the advertising campaign "5 A Day" with the entire infrastructure: (association, web, advertisement, poster, television, brochure, forum...). "5 A Day" is an international slogan. It promotes the consumption of fruit and vegetables throughout the world.

We observed the influence of advertisements, even if only for the time that they are in contact with whichever means of communication, normally the television and so avoid doing something else. Study found a positive correlation between the number of hours the television and foods requested by the children (5)

Objective:

The aim of this study was to examine pupil's attitudes to the food advertisement "5 A Day". This advertising campaign was seen on television.

From the interdisciplinary relationship between nutrition and the anthropology of food, we developed the study in two ways: on one hand, we carried out an analysis of the

intake of fruit and vegetables, and on the other hand we tried to resolve the mounting questions about the effects of food advertising, perceptions and interpretation of pupils, family and teachers with respect to the effectiveness of the campaign.

METHODS

The analysis was based on a combination of qualitative and quantitative methodologies. The relatively small number of cases favours significance over representation.

The study was carried out in the first term of the 2004-2005 course in a private school in Molina de Segura (Murcia, Spain). There were nine classrooms (234 pupils aged between 3-5 years). We selected 10 pupils in each classroom and we took a sample of 90 pupils. We only selected pupils that didn't eat in the school dining room.

The following items were used for the study:

- References
- Participant observation
- 9 discussion groups with pupils
- 90 semi structured interviews to families
- 9 nutrition workshops
- Data Collection using frequency questionnaire (180)

A participant observation was made: during the first two weeks the students were shown a video of the 5 a day campaign everyday, at the same time (10.45am) before going for break, for approximately one minute.

During the next few weeks the children were involved in various nutritional workshops. In the 3-4 year old classrooms a workshop called "the traffic light diet" was given where different elements were shown according to their recommended intake, specifically emphasizing fruit and vegetables that were within the colour green.

In the 5 year olds classroom a workshop called "element groups" was given. By using a food pyramid different types of fruit and vegetables were grouped according to what they should eat.

After the workshops they were shown a video once a week, for two weeks and then six discussion groups were executed (one for each classroom) four main topic areas were covered. Likes and dislikes, nutritional knowledge, lifestyles and physical activity and family eating habits.

At the same time interviews were carried out to the parents of each child about their intake of fruit and vegetables. They were carried out before, and during the advertising campaign. There were a total of 120 questionnaires.

Lastly and only after working with the students, 60 semi structured interviews to one member of each child's family were carried out, to gather opinions about the publicity campaign.

RESULTS

We observed a reluctance to change their behaviour. Just having knowledge about food wasn't enough to change the children's attitudes, but the repetition of the ideas provoked stereotypical answers that didn't necessarily come from a change in behaviour. The older children had already carried out workshops during courses recommended by the local council in their campaign to fight infant obesity. Because of this we noted that "they already knew what to say and do". We observed that children of this age group, especially the 3 year olds, didn't give stereotypical answers or behave like their older classmates.

The subsequent group discussions reinforced this fact. The 5 year olds were familiar with the nutritional terminology and responded easily to the message they were given "as if it were just another subject." The questionnaires and interviews carried out by their parents though showed that the changes in the consumption of fruit and vegetables depended more on other factors, like the fact that their parents also consumed them in their presence or the choice of these products along with their classmates on a given day in the classroom.

Like Signorielli and Lears indicated (6), there is a correlation between choice of food and television advertising in children between 3 and 8 years old. We observed this relationship but only if they eat with their friends. At home, although they were capable of reproducing the message of the publicity campaign, only a few of them were able to keep up the consumption on a daily basis.

The usefulness of food advertising in the students when referring to the consumption of fruit and vegetables was only seen at home during the two weeks that they were watching the adverts. The families noted a decrease in the children's references to the advertisements as time passed, and was even less when they had only watched the adverts once a week.

Although advertisements can be a very useful tool to impart certain eating habits. In the consumption of fruit and vegetables other things were of greater influence when eating with their classmates.

In FIG 1 the results of the questionnaire are shown. The biggest increase in the consumption of fruit and vegetables happens during the third and fourth week of October. Although it then decreases in the first week of November it then increases again a little in the third and fourth week which is sustained during the first week of December.

DISCUSSION

In relation to this report the ideas of Anderson (7) were very interesting, in respect to the consumption of five pieces of fruit and vegetables a day in the population of children in Scotland showing the difficulties of carrying through these eating habits.

The adverts were a useful tool to study the attitudes and perceptions of the children. The expressive ability of the publicity was essential to demonstrate its use as way to combine both the social and commercial (8).

It has been shown that children spend between 21 and 22 hours a week watching television, of which 3 hours are spent watching commercials (9). It was necessary to

gauge the repercussions of this campaign on the populations' food choices. The study also showed the tendency to show foods rich in saturated fats and complex carbohydrates and its relationship with bad eating habits. This influence at the level of publicity had a bigger quantitative influence on the children than the adverts about fruit and vegetables.

Furthermore, the studies about the influence of television (10) on children showed a change in habits that effected their future development as shown by Proctor (11). From this we had to investigate school children's interpretation of the messages they are given through advertisements as pointed out by Lytle (12).

In addition, many studies have shown the relationship between lack of physical activity and the increase of hours spent in front of the television and the increase of IMC (13) (14) (15) (16) (17) (18) (19).

The impact of advertising campaign could be multiplied if there are accompanied of other such factors as rhythmic music and heaps, toys and animation, such relaxing places as gardens and parks (20).

In the same way, children remembered the food that they were seen on television: stands out the efficiency of the advertising campaigns. In relation to this idea, Katz's study of Mc Donald (21) noted: the children are the most vulnerable opposite to the advertising because they do not warn the suggestive intentions of these messages.

This study gives us the possibility to carry out further investigations related to the influence of other factors on behaviour just like Laitinen (22) y Cooke (23) have pointed out.

IMPLICATIONS

The complexity of peoples eating habits require the introduction of both nutritional factors as well as a lot of other factors, so any educational action should take into account changeable attitudes and specifically the influence of peers.

In addition, it is important to remember that advertisements tend to persuade and affect children. Because of this, adverts should be directed to people who are able to follow or explain these nutritional recommendations.

The results of this study suggest the need to design specific educational strategies that deal with nutrition and can counterbalance the possible effects of television advertisements.

By putting first purely nutritional needs and recommendations of the population, from an anthropologic point of view, we should take into account that the chosen educative and nutritional steps taken should preventthrough food. Even though the main objective is to look after your health. (24).

REFERENCES

- (1) (2005) *La alimentación de tus niños*. Madrid. Agencia Española de Seguridad Alimentaria. Ministerio de Sanidad y Consumo.
- (2) (1990) *Prevención en la niñez y en la juventud de las enfermedades cardiovasculares del adulto: es el momento de actuar*. Ginebra. OMS.
- (3) (1998) *FAO's Programme on nutrition education in schools*. Roma. FAO.
- (4) (1995) SHACK D. *El gusto del catador: determinantes sociales y culturales de las preferencias alimentarias*. In: Contreras J, ed. *Alimentación y cultura. Necesidades, gustos y costumbres*. 111-125.
- (5) (1999) PEETER W VERLEGH J and CANDEL, M. The consumption of convenience foods: reference groups and eating situations. *Food Quality and Preference*. 10: 457-464.
- (6) (1992) SIGNORIELLI N LEARS M. Television and children's conceptions of nutrition: unhealthy messages. *Health Communication*. 4: 245-257.
- (7) (1994) ANDERSON, A.S, MARSHALL, D, LEAN, M, FOSTER, A. Five a day? Factors affecting fruit and vegetable consumption in Scotland. *Nutrition & Food Science*. 5:14-16.
- (8) (2007) NOS ALDÁS, E eds. *Lenguaje publicitario y discursos solidarios: Eficacia publicitaria ¿eficacia cultural?*. Barcelona; Icaria.
- (9) (1994) KOTZ, K & STORY M. Food advertisements during children's Saturday morning television programmes: are they consistent with dietary recommendations? *Journal Am Diet Association*. 94:1296-1300.
- (10) (2008) BUIJZENA M et al. Associations between children's television advertising exposure and their food consumption patterns: A household diary- survey study. *Appetite*. 50(2-3): 231-239.
- (11) (2003) PROCTOR M H et al. Television viewing and change in body fat from preschool to early adolescence: The Framingham Children's Study. *International Journal of Obesity*. 27 (7): 827-833.
- (12) (1997) LYTLE L ELDRIDGE A. et al. Children's interpretation of nutrition messages. *Journal Nutrition Education*. 29 (3): 128-136.
- (13) (1993) KLESGES R et al. Effects of television on metabolic rate: potential implications for children obesity. *Pediatrics*. 91:281-286.
- (14) (1984) DURANT R et al. The relationship among television watching, physical activity and body composition of young children. *Pediatric*. 94: 449-455.
- (15) (1995) TARAS H. et al. Advertised foods on children's television. *Arch. Pediatric Adolescent Medical*. 149: 649-652.
- (16) (1996) GORTMAKER S ET AL. Television viewing as a cause of increasing obesity among children in the United States. *Arch. Pediatrics Adolescent Medical*. 150: 356-361.
- (17) (2001) REES et al. *Young people and physical activity: asystematic review of research on barriers and facilitators*, London, EPP-Centre, Social Science Research Unit, Institute of Education, University of London.
- (18) (2003) BRUSS MB et al. Prevention of childhood obesity: sociocultural and familial factors. *Journal of the American Dietetic Association*. 103 (8): 1042-1045.
- (19) (2003) BRUNTON V, HARDEN A, REES R, KAVANAGH J, OLIVER S, OAKLEY A, eds. *Children and physical activity: a systematic review of barriers and facilitators*. London, EPPI-Centre, Social Science Research Unit, Institute of Education, University of London.

(20) (2005) MARYAM A MEHDI M R MOSOOMEH K M and col. Food Advertising on Iranian Children's Television: A Content Analysis and an Experimental Study with Junior High School Students. *Ecology of Food and Nutrition*. 44(2):123-133.

(21) <http://www.forbes.com/forbeslife/health/feeds/hscout/2007/08/06/hscout607093.html>

(22) (1997) LAITINEN S. Similarity of food choices among young Finnish couples. *Journal of Human Nutrition and Dietetics*. 10 (6): 353-360.

(23) (2006) Cooke L et al. Food neophobia and mealtime food consumption in 4-5 year old children. *Int.J. Behav. Nutr. Phys.* 3:14.

(24) (2002) LEVENSTEIN H.A. Nutrition and politics: government attempts to change diet of Americans. *Proceedings of the Xth International Congress of Dietetics*; 2, ed. John Libbery Eurotext.

FIGURE 1

